No. 9800165

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

DuPont Technology Holding Company, LLC.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'DP 4909'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this ninth day of June, in the year two thousand and four.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions. FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFIC

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse

The following statements are made in accordance with the Privacy Act of 1974 (5U.S.C. 552a) an the Paperwork Reduction Act (PRA) of 1995

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
D&PL Technology Holding Company, LLC.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
93-22973
DPX 8S49

3. VARIETY NAME
DP 4909

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)
PO Box 157
100 Main Street
Scott, Mississippi 38772
USA

5. TELEPHONE (include area code)
(662) 742-4141

6. FAX (include area code)
(662) 742-3182

PVPO NUMBER
9800165

FILING DATE
16 March, 1998

7. IF THE OWNER IS NOT A "PERSON" GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.
Limited Liability Company

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Delaware

9. DATE OF INCORPORATION
February 29, 1996

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)
Delta and Pine Land Company
Kelly Casavechia
P.O. Box 157
Scott, MS 38772

FILING AND EXAMINATION FEE:
$ 2,450.00
DATE 16 March, 1998

CERTIFICATION FEE:
$ 432.00
DATE 5/12/04

11. TELEPHONE (include area code)
(662) 742-4141

12. FAX (include area code)
(662) 742-3182

13. E_MAIL
kelly.h.casavechia@deltaandpine.com

14. CROP KIND (Common Name)
Soybean

15. GENUS AND SPECIES NAME OF CROP
Glycine Max

16. FAMILY NAME (Botanical)
LEGUMINOSAE

17. IS THE VARIETY A FIRST GENERATION HYBRID?
[ ] YES [X] NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse).
a. [X] Exhibit A. Origin and Breeding History of the Variety
b. [X] Exhibit B. Statement of Distinctness
c. [X] Exhibit C. Objective Description of the Variety
d. [ ] Exhibit D. Additional Description of the Variety (Optional)
e. [X] Exhibit E. Statement of the Basis of the Owner's Ownership
f. [X] Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)
g. [X] Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VATIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Ac
[ ] YES (If "yes", answer items 20 and 21 below) [X] NO (If "no", go to item 22)

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
[ ] YES [ ] NO

21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
[ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCE FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OTHER COUNTRIES?
[ ] YES [X] NO - As of 2/20/98 date of original applicatior
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR US FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?
[ ] YES [X] NO
IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNE REFERENCE NUMBER. (Please use space indicated on reverse.

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER
Jeffrey M. Tyler

NAME (Please print or type)
Jeffrey M. Tyler

CAPACITY OR TITLE
Soybean Breeder

DATE
02-04-2004

SIGNATURE OF OWNER
William V. Hugie

NAME (Please print or type)
William V. Hugie

CAPACITY OR TITLE
Vice President/Director of Research

DATE
02-05-04

0098 00165
'DP 4909'
(BT: 4/15/2004)

EXHIBIT A

ORIGIN AND BREEDING HISTORY FOR:

'DP 4909' (BT: 4/15/2004 per applicant's authorization)
<DPX 8S49>
PV# 9800165

Summer	1991	Cross 91768 was made between Hutcheson and DPX 2485
Winter	1991-92	F1 advanced to F2 under lights in Costa Rica
Summer	1992	F2 advanced to F3 by bulk pod method in Costa Rica
Fall	1992	F3 advanced to F4 in Costa Rica by bulk pod method
Spring	1993	F4 plants pulled and threshed individually in Costa Rica from cross 91768
Summer	1993	F5 plant rows were planted at Scott, MS and row 93-22973 was bulk harvested and determined to be stable and ~~breeding true for~~ uniform for characteristics listed in Exhibit C of this application. This variety has tested uniform and stable. There are no known variants. Yield was the selection criteria, as this variety was selected based on overall yield performance. (BT: 4/15/2004)
	1994	Line 93-22973 was grown in preliminary tests at Scott, MS.
	1995-1996	Line 93-22973 was grown in Advanced Yield tests in 19 replicated tests across the Mid-south and Southeast and increased to 50 units of foundation seed.
	1997	Line 93-22973 was grown in State Experiment Station Trials as DPX 9749. Seed was further increased.
	1998	DPX 9749 will be tested as DPX 8S49 in State Experiment Station trials and increased further.
		DPX 8S49 has been tested for four years, 1994-1997, and was observed to be stable and uniform. No variants have been observed during this time.

EXHIBIT B

DPL TECHNOLOGY HOLDING COMPANY, LLC.'S 'DP 4909' (BT: 12/10/2003) 9800165
(BT: 12/10/03) ~~DELTAPINE SEED'S~~ APPLICATION FOR ~~DPX 8S49~~

NOVELTY STATEMENT

'DP 4909' (BT: 12/10/'03)
To our knowledge, ~~DPX 8S49~~ most resembles P9501. Differences include but, are not restricted to the following:

'DP 4909'
(BT: 12/10/'03) 1) ~~DPX 9749~~ has tan pods whereas P9501 has brown pods.
'DP 4909'
(BT: 12/10/'03) 2) ~~DPX 9749~~ is resistant to races 3 and 14 of soybean cyst nematode whereas P9501 is susceptible.

FORM APPROVED: OMB NO. 0581-0056

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT C
(Soybean)

PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
~~Deltapine Seed~~ D&PL Technology Holding Company LLC. (LBT: 12/10/2003)	93-22973 DPX 8S49	'DP 4909' (LBT: 12/10/2003)

ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code)
100 MAIN STREET
P.O. BOX 157
SCOTT, MS 38772

FOR OFFICIAL USE ONLY
PVPO NUMBER
9800165

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:

[2]

1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ 2. SEED COAT COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other (Specify) _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

[1] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ 4. SEED SIZE: (Mature Seed)

[1][8] Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

[6] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other (Specify) _____

★ 6. COTYLEDON COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green

★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

[0] 1 = Low 2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

[0] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

★ 9. HYPOCOTYL COLOR:

[2] 1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★ 10. LEAFLET SHAPE:

[3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other (Specify) _____

11. LEAFLET SIZE:

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17')
3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

[3] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton')
3 = Dark Green ('Gnome'; 'Tracy')

★ 13. FLOWER COLOR:

[1] 1 = White 2 = Purple 3 = White with purple throat

★ 14. POD COLOR:

[1] 1 = Tan 2 = Brown 3 = Black

★ 15. PLANT PUBESCENCE COLOR:

[2] 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

[3] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton')
3 = Bushy ('Gnome'; 'Govan')

★ 17. PLANT HABIT:

[3] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will')
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

★ 18. MATURITY GROUP:

[0][7] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V
9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

★ 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

★ [2] Bacterial Pustule *(Xanthomonas phaseoli* var. *sojensis)*

★ [0] Bacterial Blight *(Pseudomonas glycinea)*

★ [0] Wildfire *(Pseudomonas tabaci)*

FUNGAL DISEASES:

★ [0] Brown Spot *(Septoria glycines)*

Frogeye Leaf Spot *(Cercospora sojina)*

★ [ ] Race 1 [ ] Race 2 [ ] Race 3 [ ] Race 4 [ ] Race 5 [1] Other *(Specify)* RACE UNKNOWN

[2] Target Spot *(Corynespora cassiicola)*

[0] Downy Mildew *(Peronospora trifoliorum* var. *manshurica)*

[0] Powdery Mildew *(Microsphaera diffusa)*

★ [0] Brown Stem Rot *(Cephalosporium gregatum)*

[2] Stem Canker *(Diaporthe phaseolorum* var. *caulivora)*

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

★ [0] Pod and Stem Blight *(Diaporthe phaseolorum var. sojae)*

[0] Purple Seed Stain *(Cercospora kikuchii)*

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[0] Rhizoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora Rot *(Phytophthora megasperma var. sojae)*

★ [1] Race 1 [ ] Race 2 [ ] Race 3 [ ] Race 4 [ ] Race 5 [ ] Race 6 [ ] Race 7

[ ] Race 8 [ ] Race 9 [ ] Other *(Specify)* _____

VIRAL DISEASES:

[0] Bud Blight (Tobacco Ringspot Virus)

[0] Yellow Mosaic (Bean Yellow Mosaic Virus)

★ [0] Cowpea Mosaic (Cowpea Chlorotic Virus)

[2] Pod Mottle (Bean Pod Mottle Virus)

★ [2] Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

★ [ ] Race 1 [ ] Race 2 [2] Race 3 [ ] Race 4 [2] Other *(Specify)* RACE 14

[0] Lance Nematode *(Hoplolaimus Columbus)*

★ [1] Southern Root Knot Nematode *(Meloidogyne incognita)*

★ [0] Northern Root Knot Nematode *(Meloidogyne Hapla)*

[1] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

[0] Reniform Nematode *(Rotylenchulus reniformis)*

[ ] OTHER DISEASE NOT ON FORM *(Specify)*: _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

★ [0] Iron Chlorosis on Calcareous Soil

(4/16/2004 per applicant's authorization)

[ ] Other *(Specify)* _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] Mexican Bean Beetle *(Epilachna varivestis)*

[2] Potato Leaf Hopper *(Empoasca fabae)*

[0] Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	P9501	Seed Coat Luster	P9501
Leaf Shape	P9501	Seed Size	P9501
Leaf Color	HUTCHESON	Seed Shape	P9501
Leaf Size	HUTCHESON	Seedling Pigmentation	P9501

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
~~DPX 8849~~ Submitted 'DP 4909' (BT: 12/10/2003)	121	2.0	97			37.8	17.9	18.0	
P9501 Name of Similar Variety	120	1.7	89			37.7	18.6	18.0	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.

2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.

3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A_2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.

4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

EXHIBIT D

D&PL Technology Holding Company, LLC's ~~DELTAPINE SEED~~'S APPLICATION FOR 'DP 4909' (BT: 12/10/2003) ~~DPX 8S49~~ (BT: 4/16/2004)

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ADDITIONAL DESCRIPTION OF VARIETY

'DP 4909' (BT: 4/16/2004) ~~DPX 8S49~~ is a late group IV with excellent yield potential and disease resistance. It is an F_4 derived line composited in the F_5 generation from the cross of Hutcheson x DPX 2485. DPX 2485 is a group VII selection from the cross of Bedford x DP 566. 'DP 4909' (BT: 12/10/2003) ~~DPX 8S49~~ has white flowers, tawny pubescence and tan pods at maturity. Seeds average 2500 per pound and are dull yellow with black hila. 'DP 4909' (BT: 12/10/2003) ~~DPX 8S49~~ is resistant to races 3 and 14 soybean cyst nematode, stem canker and soybean mosaic virus.

~~DPX 9849~~ 'DP 4909' (BT: 12/10/2003)

PRODUCT SUMMARY SHEET

KEY FEATURES

Late group IV with excellent yield potential
Resistant to race 3 and 14 of SCN
Resistant to stem canker
Resistant to soybean mosaic virus

PRODUCT DESCRIPTION

Trait	Phenotype
Relative maturity	4.9-5.0
Roundup Ready	No
STS®	No
Flower color	White
Pubescence color	Tawny
Hilum color	Black
Podwall color	Tan
Seed size	Large - 2500 SD/Lb
Seed protein	37.9
Seed oil	17.9
Peroxidase reaction	Untested
Seedcoat luster	Dull
Hypocotyl color	Green With Bronze
Seed shape	Spherical Flattened
Leaflet size	Medium
Leaflet color	Dark Green
Canopy	Full
Growth habit	Indeterminate
SCN race 3	Resistant
SCN race 14	Moderately Resistant
Common root knot	Susceptible
Peanut root knot	Susceptible
Javanese root knot	Susceptible
Lance nematode	Untested
Frogeye leafspot	Susceptible
Sudden death	Moderately Susceptible
Stem canker	Resistant
Phytophthora root rot	Field Tolerant
Red crown rot	Untested
Chloride tolerance	Sensitive
SMV	Resistant
Aerial Blight	Moderately Susceptible

BREEDER'S SUBJECTIVE RATINGS

Narrow rows	Very Good
Wide rows	Excellent
No-till	Excellent
Late planting	Excellent
Early planting	Excellent
Sandy Soils	Good
Medium Soil	Excellent
Poorly-drained soils	Excellent
Shatter resistance	Excellent

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PRODUCT IDENTITY

Line selected by:	Dr. Grover Shannon
Suggested name:	DPX 9849 ('DP 4909' = final name)
Former designation:	93-22973 Key # 5550 (BT: 4/16/04 Per applicant's authorization)
Pedigree:	Hutcheson x DPX 2485 (Bedford x DP 566)
Areas of adaptation:	Midsouth and Lower Southeast
Replace:	DP 3499
Complement:	DP 3478
Main competition:	P9511, RA 452, P9501
Most similar line:	P9501

YIELD HISTORY

Outyielded P9501 by 7% in 20 Midsouth trials
Yield rank was 16 out of 36 in 1997 (poor seed)
Yield rank was 1 out of 36 in 1996
Yield rank was 2 out of 24 in 1995

KNOWN WEAKNESSES

Susceptible to frogeye leaf spot
Susceptible to root knot nematodes
Not tolerant to Roundup

SEED STOCK STATUS

There are about 390 bushels of foundation seed.

ADDITIONAL DESCRIPTION

'DP 4909' (BT: 2/10/2004)
~~DPX 9849~~ is a late group IV with excellent yield potential and disease resistance. It is an F_4 derived line composited in the F_5 generation from the cross of Hutcheson x DPX 2485. DPX 2485 is a group VII selection from the cross of Bedford x DP 566. Plants are tall with white flowers, tawny pubescence and tan pods at maturity. Seeds are dull yellow with black hila averaging 2500 seed per pound. There may be up to 1% offtype plants with either/or purple flowers, grey pubescence and hila other than black. ~~DPX 9849~~ 'DP 4909' (BT: 2/10/2004) is resistant to races 3 and 14 soybean cyst nematode, stem canker, frogeye leaf spot and soybean mosaic virus. It is susceptible to root knot nematodes. ~~DPX 9849~~ has yielded 7% more than RA452 in 28 DP tests.
'DP 4909' (BT: 2/10/2004)

'DP 4909'
~~DPX 9849~~ (BT: 2/10/2004)

'DP 4909' (BT: 2/18/2004)
<DPX 9849>

PRODUCT PERFORMANCE

Combined data, all locations:

	YIELD		MAT*	HGT	LDG
	bu/ac	%YLD		(inches) (BT: 2/10/2004 per applicant's confirmation)	
'DP 4909' (BT: 2/10/2004) (<DPX 9849>)	**49.5**	**107**	**+1**	**37**	**1.8**
P 9501	48.0	104	0	35	1.6
DP 3478	46.2	101	-6	32	1.9
RA 452	45.8	100	0	36	2.1
Locations	28	28	12	28	28

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Midsouth data

Midsouth, all locations

	YIELD		MAT*	HGT	LDG
	bu/ac	%YLD			
'DP 4909' (BT: 2/10/2004) (<DPX 9849>)	**49.3**	**112**	**+1**	**36**	**1.7**
P9501	46.2	105	0	34	1.3
DP 3478	44.1	100	-6	31	2.0
RA 452	44.0	100	0	38	1.8
Locations	20	20	8	20	20

Midsouth, by state:

	YIELD		AR	LA	MS	TN	TX
	bu/ac	%YLD					
'DP4909' (BT: 2/10/2004) (<DPX 9849>)	**49.3**	**112**	**44.5**	**47.0**	**57.5**	**50.6**	**37.2**
P 9501	46.2	105	39.5	48.6	53.4	48.7	26.3
DP 3478	44.1	100	35.0	42.5	55.3	51.2	26.1
RA 452	44.0	100	39.2	41.5	51.7	45.5	28.4
Locations	20	20	3	6	6	3	2

'DP 4909'
<DPX 9849> (BT: 2/10/2004)

'DP 4909' (BT: 2/10/2004)
<DPX 9849>

PRODUCT PERFORMANCE

Southeast data:

Southeast, all locations:

	YIELD		MAT*	HGT	LDG
	bu/ac	%YLD			
'DP 4909' (BT: 2/10/2004) <DPX 9849>	**51.5**	**102**	**0**	**39**	**1.9**
P 9501	51.6	103	0	37	2.3
DP 3478	51.5	102	4	34	1.8
RA 452	50.3	100	-1	37	2.3
Locations	8	8	4	8	8

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Southeast, by state:

	YIELD		NC	SC
	bu/ac	%YLD		
'DP 4909' (BT: 2/10/2004) <DPX 9849>	**51.5**	**102**	**52.7**	**47.5**
P 9501	51.6	103	55.6	40.0
DP 3478	51.5	102	58.1	34.5
RA 452	50.3	100	52.8	43.5
Locations	8	8	5	3

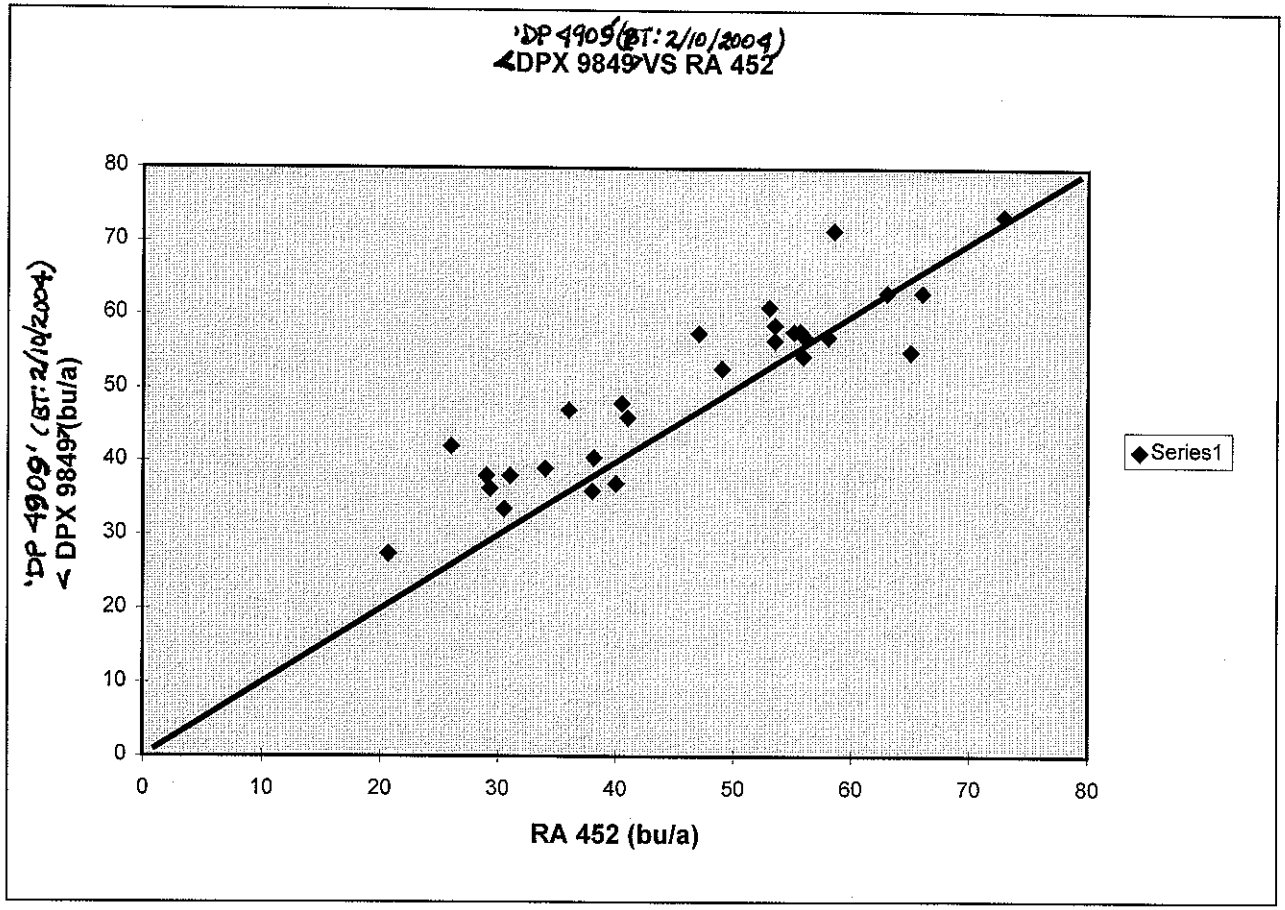
By soil type, planting and disease situation

NAME	LOAM	CLAY	CYST	EARLY PLANTED	AERIAL BLIGHT	MEAN
'DP 4909' (BT: 2/10/2004) <DPX 9849>	**52.1**	**46.3**	**45.5**	**61.7**	**52.7**	**49.5**
P9501	52.4	43.7	41.2	56.6	58.0	48.0
DP 3478	52.6	39.0	39.0	56.0	49.0	46.2
RA 452	51.0	41.5	39.8	59.1	59.7	45.8
Location:	9	10	5	3	1	28

'DP 4909' <DPX 9849> (BT: 2/10/2004)

'DP 4909' (BT: 2/10/2004)
<DPX 9849>

PRODUCT PERFORMANCE



This scattergram illustrates head-to-head performance of 'DP 4909' (DPX 9849) compared to RA 452. In 27 comparisons, 'DP 4909' (BT: 2/10/2004) (DPX 9849) outyielded RA 452 twenty-one times.

'DP 4909' (BT: 2/10/2004)

'DP 4909' (OFFICIAL NAME OF <DPX 9849>) (BT: 2/10/2004)
<DPX 9849>

9800165

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'DP 4909' (BT:4/16/'04)
<DPX 9849>

DISEASE REACTION DOCUMENTATION

9800165

Soybean Cyst Nematode (*Heterodera glycines*)

Data from Dr. Lawrence Young, USDA, Jackson, Tennessee 1997

Line	Race 3 Score 1995	Race 3 Score 1996	Race 14 Score 1995	Race 14 Score 1996
'DP 4909' (BT:4/16/'04) <DPX 9849>	**2.4**	**1.3**	**4.0**	**2.0**
RES. CHK	1.2	1.0	2.1	1.2
SUS. CHK	3.7	5.0	5.0	4.7

Scale: 1= 0 to 5 females/plant, 2= 6 to 10, 3= 11 to 20, 4 = 21-40, 5 = more than 40 females/plant

Root Knot Nematode (*Meloidogyne incognita* and *M. arenaria*)

Data from Dr. Robert Kinloch, Univ. of Florida, Jay, Florida 1997

Line	*M.I.* Score 1996	*M.A.* Score 1996
'DP 4909' (BT:4/16/'04) <DPX 9849>	**3.5**	**2.5**
RES. CHK	0.0	2.0
SUS. CHK	5.0	5.0

Scale: 1= no galling, 5= very severe galling

Stem Canker (*Diaporthe phaseolorum* (Cooke & Ellis) Sacc. f. sp. *meridionalis* (Morgan-Jones)

Data from Dr. Grover Shannon, Deltapine Seed, Scott, Mississippi 1997

Line	1997
'DP4909' (BT:4/16/'04) <DPX 9849>	**1.0**
RES. CHK	1.0
SUS. CHK	5.0

Scale: 1= no symptoms, 5= very severe symptoms

'DP4909' (BT: 2/10/2004)
<DPX 9849>

'DP 4909' (BT:4/16/'04)
<DPX 9849> (BT:4/16/'04)

DISEASE REACTION DOCUMENTATION

FROGEYE LEAF SPOT

'DP 4909' (BT:4/16/'04)
<DPX 9849>is susceptible to frogeye leafspot based on limited observations.

SUDDEN DEATH SYNDROME

9800165

'DP4909' (BT:4/16/2004)
<DPX 9849>is untested against sudden death syndrome.

AERIAL BLIGHT

<DPX 9849>is moderately susceptible to aerial blight.
'DP 4909' (BT:4/16/'04)

Line	1996
(BT:4/16/'04)<DPX 9849> ('DP4909')	2.4
DP 3478	1.4
HB49	1.7
RA 452	2.3
P9501	0.6

Scale: 1=no symptoms, 5=very severe symptoms

HERBICIDE TOLERANCE

'DP 4909' (BT:4/16/'04)
<DPX 9849>has no known sensitivity to common soybean herbicides used according to the label. However it appears to be sensitive to the herbicide Authority (Sulfentrazone).

CHLORIDE TOLERANCE

'DP4909' (BT:4/16/'04)
<DPX 9849>reaction to high chloride is ~~unknown.~~ sensitive (BT:4/16/2004 per applicant's correspondence)

SEED STOCK

There are approximately 390 bushels of foundation seed of <DP4909> <DPX 9849>. (BT:4/16/'04)

'DP 4909' (BT:2/10/2004)
<DPX 9849>

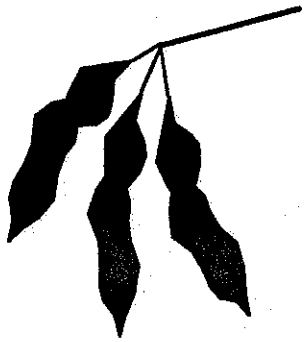
SOYBEAN PRODUCT NOMINATION FORM

Suggested Nominee Number: DPX 9749 = 'DP 4909' (BT: 4/16/2004)

Experimental Designations: 93-22973 Key #5550

9800165

Submitted by: Grover Shannon and Gus Dunlap



Date Submitted: January 1, 1997

Parentage: HUTCHESON x DPX 2485 Cross 91-768
DPX 2485 = BEDFORD x DP 566

Maturity: Late Group IV RM 4.9

Data Collected from 19 Replicated Yield Tests.

I. Plant & Seed Characteristics:

Flower Color:	White
Pubescence Color:	Tawny
Hilum Color:	Black
Pod Wall Color:	Tan
Seed Coat Luster:	Dull
Leaf Shape:	Ovate
Plant Type:	Indeterminate

II. Agronomic Characteristics: 1995-96

Line	Mat.	Plant Height	Ldg.	Shat.
<DPX 9749=DP 4909' (BT: 4/16/04)	+1	38	2.0	Exc.
P9501	0	35	1.7	Good
HB49	+4	44	2.9	Exc.
RA452	0	39	2.2	Exc.
DP 3478	-5	32	2.0	Good

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III. Yield Data:

1995-96 Yield & Agronomic Data Summary

Line	Yield	% Yield	Mat.	Hgt.	Ldg.
<DPX 9749=DP 4909' (BT: 4/16/04)	49.7	107	+1	38	2.0
P9501	46.6	100	0	35	1.7
HB49	45.9	98	+4	44	2.9
RA452	45.3	97	0	39	2.2
DP 3478	44.4	95	-5	32	2.0
# Tests	19	19	9	19	16

1996 Yield & Agronomic Data Summary

Line	Yield	% Yield	Mat.	Hgt.	Ldg.
<DPX 9749=DP 4909' (BT: 4/16/04)	47.3	105	+1	37	2.1
P9501	45.3	100	0	35	1.7
DP 3478	45.1	100	-4	31	2.4
DPX 3497	45.0	99	+2	40	2.5
HB49	43.8	97	+4	43	2.7
RA452	43.5	96	+1	38	1.7
# Tests	9	9	4	9	9

1995 Yield & Agronomic Data Summary

Line	Yield	% Yield	Mat.	Hgt.	Ldg.
<DPX 9749=DP 4909' (BT: 4/16/2004)	51.7	108	0	38	1.9
P9501	47.7	100	0	35	1.7
HORNBECK 49	47.7	100	+3	45	3.1
RA452	47.0	99	-1	39	2.7
DP 3478	44.0	92	-5	34	1.5
# Tests	10	10	5	10	7

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Yield Summary in Bu/A

By Region: 1995-96

(BT:4/16/'04)

LINE 'DP 4909'	MIDSOUTH YLD	MIDSOUTH % YLD	SOUTHEAST YLD	SOUTHEAST % YLD	OVERALL YLD	OVERALL % YLD
<DPX 9749>	50.5	109	48.6	104	49.7	107
P9501	46.3	100	46.9	100	46.6	100
HB49	44.5	96	48.7	104	45.9	98
RA452	45.0	97	45.7	97	45.3	97
DP 3478	44.7	96	44.4	95	44.6	95
# TESTS	13	13	6	6	19	19

By States: 1995-96

(BT:4/16/'04)

LINE	TN	AR	MS	LA	NC	SC	TX	MEAN
<DPX 9749> = 'DP 4909'	52.9	47.3	56.8	50.7	48.8	47.5	27.4	49.7
P9501	51.1	41.8	48.8	50.6	50.5	40.0	18.5	46.6
R452	47.8	41.8	50.9	45.7	47.0	43.5	20.7	45.9
HB49	43.2	40.4	49.2	48.5	51.1	44.0	20.9	45.3
DP 3478	54.8	36.2	48.5	46.3	49.1	34.5	18.2	44.6
# TESTS	2	2	4	4	4	2	1	19

By Soil Type Planting and Disease Situation: 1995-96

(BT:4/16/'04)

Line = 'DP 4909'	Loam	Clay	Cyst	Early Planted	Aerial Blight	Mean
<DPX 9749>	49.7	45.7	47.5	65.1	52.7	49.7
P9501	48.7	41.6	42.4	54.4	58.0	46.6
RA452	47.2	41.0	41.3	56.2	49.0	45.9
HB49	49.4	41.7	37.9	55.1	51.7	45.3
DP 3478	47.1	37.3	39.3	57.0	59.7	44.6
# TESTS	7	6	3	2	1	19

1994-96 HEAD TO HEAD COMPARISONS

(BT:4/16/'04)

'DP 4909' = <DPX 9749> vs	Total Comp.	Won by- Bu/A	# Wins	% Wins
P9501	19	3.1	13	68
HORNBECK	19	3.8	14	74
RA452	19	4.4	16	84
DP 3478	19	5.3	15	79
DP 3497	9	3.4	7	78

YIELD IN BU/A
BY TESTS AND LOCATIONS

9800165

1996 - 649M

LINE	MIDSOUTH							
	TN RP	TX CV	AR DM	MS SL	MS SC	LA TL	LA MG	Mid Sth Mean
<DPX 9749>	57.7	27.4	61.0	58.6	40.5	54.4	52.7	50.3
P9501	58.6	18.5	53.6	49.2	30.0	58.0	58.0	46.6
DP 3478	64.0	18.2	48.9	49.0	31.8	46.8	59.7	45.5
DPX 3497	53.2	18.4	59.9	50.8	40.0	52.9	53.0	46.9
HB49	53.3	20.9	47.7	53.6	30.8	55.9	51.7	44.8
RA452	55.1	20.7	53.0	53.5	38.1	55.9	49.0	46.5
C.V. %	6.0	12.0	7.2	11.0	13.0	6.4	5.4	
LSD.10	3.6	2.5	3.8	5.7	3.9	3.5	3.2	

LINE	SOUTHEAST			
	NC CL	NC SF	Sth East Mean	Over All Mean
<DPX 9749>	36.3	39.0	37.7	47.5
HB49	36.7	43.7	40.2	43.8
DP 3478	46.7	41.0	43.9	45.1
DPX 3497	37.0	40.0	38.5	45.0
P9501	34.0	47.3	40.7	45.3
RA452	28.3	38.0	33.2	43.5
C.V. %	15.4	13.8		
LSD.10	6.4	7.6		

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YIELD IN BU/A
BY TESTS AND LOCATIONS

1995 - 549A

MIDSOUTH							
LINE (DP 4909 TBT: 4/16/2004)	TN RP	AR DM	MS SL	MS SC	LA TL	LA MG	Mid-Sth Mean
<DPX 9749>	48.0	33.5	71.5	56.5	38.0	57.5	50.8
P9501	43.5	30.0	59.5	56.5	32.5	54.0	46.0
HB49	33.0	33.0	56.5	56.0	39.0	47.5	44.2
RA452	40.5	30.5	58.5	53.5	31.0	47.0	43.5
DP 3478	45.5	23.5	65.0	48.5	30.0	48.5	43.5
C.V. %	13.5	8.6	6.7	6.6	7.7	4.3	8.3
LSD.10	7.6	3.5	5.4	4.7	3.7	6.1	2.2

SOUTHEAST						
LINE (DP 4909 TBT: 4/16/2004)	NC SR	NC CL	SC HV	SC MA	Sth East Mean	Over All Mean
<DPX 9749>	57.0	63.0	57.0	38.0	54.0	51.7
P9501	56.0	65.0	51.0	29.0	50.0	47.7
HB49	51.0	73.0	53.0	35.0	53.0	47.7
RA452	56.0	66.0	58.0	29.0	52.0	47.0
DP 3478	47.0	62.0	47.0	22.0	44.0	44.0
C.V. %	7.8	9.0	5.5	18.0	9.6	
LSD.10	5.7	10.0	3.6	7.8	4.0	

IV. DISEASE REACTION AND OTHER INFORMATION: 9800165

Cyst Nematode

'DP4909'=<DPX 9749>is resistant to race 3 and is moderately resistant to race 14 of soybean cyst nematode. (BT:4/16/04)

	Race 3									
	1995					1996				
	1	2	3	4	5	1	2	3	4	5
('DP4909') = <DPX 9749> (BT:4/16/2004)	0	3	2	0	0	4	2	0	0	0
Res. Chk	6	1	0	0	0	7	0	0	0	0
Sus. Chk	0	0	4	1	2	0	0	0	0	6

Location: Jackson, TN
Conducted by: Dr. Lawrence Young
USDA, Nematologist

	Race 14									
	1995					1996				
	1	2	3	4	5	1	2	3	4	5
'DP4909' (BT:4/16/2004) <DPX 9749>	0	0	0	5	0	3	3	0	1	0
Res. Chk.	1	4	2	0	0	6	1	0	0	0
Sus. Chk.	0	0	0	0	7	0	0	0	2	4

Location: Jackson, TN
Conducted by: Dr. Lawrence Young
USDA, Nematologist

Root Knot Nematode 1 = No galling 5 = Very severe galling

'DP4909'=<DPX 9749>is susceptible to root knot nematode. (BT:4/16/04)

	Common Root Knot M. Incognita 1996	Peanut Root Knot M. arenaria 1996
'DP4909' (BT:4/16/2004) <DPX 9749>	3.5	2.5
Res. Check	0.0	2.0
Sus. Check	5.0	5.0

Location: Jay, FL
Conducted by: Dr. Robert Kinloch
Professor of Nematology
University of Florida

Stem Canker

<DPX 9749> is probably resistant to stem canker based on limited tests.
'DP 4909' (BT:4/16/2004)

Frogeye Leaf Spot

<DPX 9749> is probably resistant to frogeye leafspot based on limited observations. 'DP4909' (BT:4/16/2004)

<DPX 9749> noted later as being susceptible to frogeye leafspot disease (BT:2/10/2004)

Sudden Death Syndrome

<DPX 9749> is untested against sudden death syndrome. ('DP4909' (BT:4/16/2004))

Aerial Blight

1 = None 5 = Very Severe

<DPX 9749> is moderately susceptible to aerial blight. ('DP4909' (BT:4/16/2004))

	1996
'DP4909' (BT:4/16/2004) <DPX 9749>	2.4
DP 3478	1.4
HB49	1.7
RA452	2.3
P9501	0.6

Location: Morganza, LA
Conducted by: Grover Shannon

Herbicide Tolerance

<DPX 9749> has no known sensitivity to common soybean herbicides used according to the label. ('DP4909' (BT:4/16/2004))

Chloride Tolerance

<DPX 9749> reaction to high chloride is ~~unknown~~ sensitive. ('DP4909' (BT:4/16/2004)) (BT:4/16/2004 per applicant's request)

Seed Stock

There will be approximately 40-50 units of breeder seed of 'DP4909' <DPX 9749> after increase in Costa Rica. (BT:4/16/2004)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)

D&PL TECHNOLOGY HOLDING COMPANY, LLC.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

93-22973
DPX 8S49

3. VARIETY NAME

DP 4909

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)

P.O. BOX 157
SCOTT, MISSISSIPPI 38772

5. TELEPHONE *(Include area code)*

662.742.4141

6. FAX (Include area code)

662.742.3182

7. PVPO NUMBER

9800165

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** [X] **YES** [ ] **NO**

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** [X] **YES** [ ] **NO**

10. Is the applicant the original owner? [X] **YES** [ ] **NO** **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
[ ] **YES** [ ] **NO** **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
[ ] **YES** [ ] **NO** **If no, give name of country**

11. Additional explanation on ownership *(If needed, use the reverse for extra space)*:

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) ot the Plant Variety Protection Act for definitions.